

## CLAIMS

1. A method for early detection of configuration information of a predetermined type, said method comprising: *PPP frames*  
receiving, on a communication device, a plurality of framed data packets, each of said framed data packets containing an information portion;  
detecting, on said communication device, a beginning of said information portion within one of said framed data packets; and  
determining, on said communication device, whether said information portion contains said configuration information of a predetermined type,  
wherein said communication device unframes said one of said framed data packets when said information portion contains said configuration information of a predetermined type.

2. The method of Claim 1, wherein said detecting includes scanning said plurality of said framed data packets and establishing said beginning of said information portion for one of said framed data packets by identifying a frame-demarcating character.

3. The method of Claim 2, wherein said detecting includes, unescaping, on said communication device, contents of a predetermined number of bytes within said information portion, and  
determining, on said communication device, whether said contents of said unescaped predetermined number of bytes includes predetermined characters,

wherein said communication device unescapes contents of additional consecutive bytes, succeeding said predetermined number of bytes, when said contents of said unescaped predetermined number of bytes includes said predetermined characters, and

wherein said communication device determines whether contents of said unescaped predetermined number of bytes and contents of additional

consecutive bytes contain said configuration information of a  
14 predetermined type.

4. The method of Claim 2, wherein said detecting includes,  
2 determining, on said communication device, whether contents of a  
particular byte or bytes of said information portion contains information of a  
4 type associated with said particular byte, and  
determining, on said communication device, whether said contents  
6 of said particular byte contains said configuration information of a  
predetermined type,  
8 wherein said communication device progresses to a subsequent stage  
when said contents of said particular byte lacks said configuration  
10 information of a predetermined type and said configuration information of  
a predetermined type is disposed in a byte position subsequent to said  
12 particular byte.

5. The method of Claim 4, wherein said progresses to a  
2 subsequent stage further includes,  
examining, on said communications device, contents of at least one  
4 succeeding byte of said information portion, said succeeding byte being  
subsequent to said particular byte, and  
6 determining, on said communication device, whether contents of  
said succeeding byte contains information of a type associated with said  
8 succeeding byte, and  
determining, on said communication device, whether said contents  
10 of said succeeding byte contains said configuration information of a  
predetermined type,  
12 wherein said communication device sequentially examines  
successive bytes of said information portion until contents of said  
14 succeeding byte contains said configuration information of a predetermined  
type.

6. The method of Claim 5, wherein said contents of said particular  
2 byte and said contents of said succeeding byte includes escaped information.

7. The method of Claim 5, wherein said contents of said particular  
2 byte and said contents of said succeeding byte includes unescaped  
information.

8. A system for early detection of configuration information of a  
2 predetermined type, said system comprising:

a terminal device for transmitting and receiving a plurality of framed  
4 data packets, each of said framed data packets containing an information  
portion; and

6 a communication device coupled to said terminal device,  
wherein said communication device detects a beginning of said  
8 information portion within one of said framed data packets and determines  
whether said information portion contains said configuration information  
10 of a predetermined type, and

wherein said communication device unframes said one of said  
12 framed data packets when said information portion contains said  
configuration information of a predetermined type.

9. The system of Claim 8, wherein said detecting by said  
2 communication device includes scanning said plurality of said framed data  
packets and establishing said beginning of said information portion for one  
4 of said framed data packets by identifying a frame-demarcating character.

10. The system of Claim 9, wherein said detecting by said  
2 communication device includes,

unescaping contents of a predetermined number of bytes within said  
4 information portion, and

determining whether said contents of said unescaped predetermined  
6 number of bytes includes predetermined characters,

wherein said communication device unescapes contents of additional  
8 consecutive bytes, succeeding said predetermined number of bytes, when  
said contents of said unescaped predetermined number of bytes includes said  
10 predetermined characters, and

wherein said communication device determines whether contents of  
12 said unescaped predetermined number of bytes and contents of additional  
consecutive bytes contain said configuration information of a  
14 predetermined type.

11. The system of Claim 9, wherein said detecting by said  
2 communication device includes,

determining whether contents of a particular byte or bytes of said  
4 information portion contains information of a type associated with said  
particular byte or bytes, and

6 determining whether said contents of said particular byte or bytes  
contains said configuration information of a predetermined type,

8 wherein said communication device progresses to a subsequent stage  
when said contents of said particular byte or bytes lacks said configuration  
10 information of a predetermined type and said configuration information of  
a predetermined type is disposed in a byte position subsequent to said  
12 particular byte or bytes.

12. The system of Claim 11, wherein said communication device  
2 progressing to a subsequent stage further includes,

examining contents of at least one succeeding byte of said information  
4 portion, said succeeding byte being subsequent to said particular byte, and

determining whether contents of said succeeding byte contains  
6 information of a type associated with said succeeding byte and whether said  
contents of said succeeding byte contains said configuration information of a  
8 predetermined type,

wherein said communication device sequentially examines  
10 successive bytes of said information portion until contents of said

12 succeeding byte contains said configuration information of a predetermined type.

2 13. The method of Claim 12, wherein said contents of said particular byte and said contents of said succeeding byte includes escaped information.